comparing no cryotherapy to 7 hours. Additional prospective convenience sample studies showed shorter durations to also be effective.

Methods: A randomized clinical trial to compare the incidence and severity of mucositis between the standard practice of 6 hours of cryotherapy and 2 hours, based on previously cited evidence and the half-life of Melphalan was developed. After enrollment, patients are computer randomized to treatment with either 2 or 6 hours of cryotherapy. Cryotherapy is standardized to the use of shaved ice, with 1 ounce placed in the mouth, allowed to melt and then replaced. Compliance is monitored by the nursing staff. The patient completes an evaluation of the cryotherapy experience, as well as the Patient-Reported Oral Mucositis Symptom Scale daily, noting subjective symptoms. Mucositis is graded daily by a nurse practitioner using the World Health Organization Oral Toxicity Scale. Pain medication and nausea/vomiting are obtained from the medical record. All measurements are completed until Day +21 or discharge. A Cochran-Mantel-Haenszel chi-square test will be used to compare the proportion of patients who develop severe mucositis (Grade 3-4) between the treatment arms.

Results: At the time of this submission, 37 patients have been treated on this study supported by a grant from The DAISY Foundation. Target enrollment is 142, with a full mid-point analysis planned. Current rate of enrollment is 2 subjects per week. The results of this study have implications to change practice with this regimen as well as other regimens that combine Melphalan with additional agents.

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Alcohol Impregnated Caps: Are They Effective for Preventing CLABSI?

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Background: Approximately 41,000 central line-associated blood stream infections (CLABSI) occur in U.S. hospitals annually with an estimated mortality rate of 12 - 25% and annual cost estimates of $2.3 – 28 billion. Immunocompromised bone marrow transplant (BMT) patients pose an increased risk for CLABSI acquisition. Central venous catheter (CVC) hub contamination is a known risk factor for CLABSI. Curos® alcohol impregnated port protectors have been shown to reduce CLABI in several patient populations.

Methods: An Institutional Review Board for Human Use approved observational study was conducted on a 16 bed BMT unit at a tertiary hospital. All BMT patients admitted with a new CVC or an existing CVC with negative blood cultures were invited to participate. During a six month intervention period, staff performed best practice by scrubbing the MicroCLAVE® neutral pressure hubs with alcohol and used Curos® caps for passive disinfection on all line ports. The intervention period December 2011 - June 2012 was compared to the historical control period June 2011 - November 2011. Rounds were performed to monitor staff compliance with cap usage.

Results: Twenty-one BMT patients participated in the study. Three of the twenty-one patients acquired CLABSI. During the intervention phase, CLABSI occurrence was 4 infections / 847 device days. During the historical control period CLASBSI occurrence was 4 infections / 830 device days. Staff compliance with Curos® cap usage was 95%. Patient's perceptions of line care were improved.

Conclusion: The CLABSI rate on this BMT unit did not improve with the Curos® alcohol impregnated cap added to the CVC best practice bundle. Sustained, ongoing multidisciplinary involvement evaluating each aspect of the CLABSI bundle should be further evaluated in effort to reduce BMT CLABSI rate.

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Staff Registered Nurses On the Blood and Marrow Transplant Unit: Their Practice and Self-Care Needs

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Background: Registered nurse (RN) turnover represents a significant cost to the institution, as well as a burden in training and replacing that RN. Bone marrow transplant (BMT) staff are constantly engaged in providing support to families and meeting their needs throughout the transplant process. This process is intense and complex medically, emotionally, socially and spiritually for the families and the staff that care for them. Work-related stress on the BMT unit impacts nurse retention, job satisfaction, and quality of care.

Purpose: The purpose of this study is to discover, describe, and analyze all experiences of Registered Nurses (RNs) on the BMT unit at Cincinnati Children's Hospital Medical Center (CCHMC). Aims include: 1.) discover knowledge through documenting and interpreting staff RN's beliefs, meanings, expectations and expressions of care, 2.) authenticating beliefs about staff RNs professional role and practice of caring for pediatric BMT patients.

Methods: Leininger's theory of Culture Care Diversity and Universality guided this qualitative study. Ethnonursing methodology with a focus group approach was used for data collection. Hour long focus groups were held at CCHMC until saturation reached. Additional study sessions with caregivers and managers provide enrichment. Groups were recorded and transcribed with personal identifiers removed for confidentiality. Code words are identified from raw data and categorized into patterns with NVivo Software. Themes that emerge are being analyzed. Evaluation criteria include credibility, confirmability, meaning-in-context, recurrent patterning, saturation, and transferability.

Results: Preliminary results indicate stress as a theme. Less experienced staff experience stress with time management and task completion. More experienced staff experienced stress with responsibility of being resource, complexity of care, and maintaining a positive environment.

Conclusions: Interventions aimed at stress management and reduction could be beneficial for this population.

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Patients' Expression of Treatment Outcome Uncertainty and Risk Before, During and After Stem Cell Transplantation

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